

TARUTIN, G.

Compensation of the reactive power of electric gantry cranes.  
Mor.flot 21 no.2:11-12 F '61. (MIRA 14:6)

1. Vedushchiy konstruktor proyektno-konstruktorskogo byuro  
Upravleniya po proizvodstvu i montazhu portovogo pod'yemno-  
transportnogo oborudovaniya Ministerstva morskogo flota.  
(Electric cranes)

1 AKU1117

USSR/Physics-Piezoelectricity

FD-1221

Card 1/1 Pub. 153-5/22

Author : Smolenskiy, G. A., Tarutin, N. P. and Grudtsin, N. P.

Title : Piezoelectric properties of solid solutions of barium zirconate in barium titanate

Periodical : Zhur, tekhn. fiz., 24, 1584-1593, Sep 1954

Abstract : The same laws were found to govern solid solutions of  $\text{BaZnO}_3$  in  $\text{BaTiO}_3$  and of  $\text{BaSnO}_3$  in  $\text{BaTiO}_3$ . The peak value of dielectric permeability was found at a content of 18%  $\text{BaZnO}_3$ . The peak dielectric permeability of solid solutions with a weak electrostriction decreased noticeably after polarization by high voltage. The maximum value of the piezomodulus is observed at a temperature lower than the peak dielectric permeability. Seven references including one US.

Institution :

Submitted : March 9, 1954

APPROVED FOR RELEASE: Thursday, September 26, 2002  
FOR RELEASE: Thursday, September 26, 2002  
CIA-RDP86-00513R001755020015-5

TARUTIN, P. P.

Tarutin, P. P. - "Investigation of the results to improve the technology of milling tri-graded wheat," In the symposium: Soobshch. i referaty (Vsesoyuz. nauch.-issled. in-t zerna i produktov ego pererabotki), Moscow, 1949, p. 39-42

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

TARUTIN, P. P.

Tarutin, P. P. - "No. 3 VNIIZ experimental movalbe separators with closed air cycle",  
Trudy Vsesoyuz. nauch.-issled. in-ta zerna i produktov ego sererabotki, Issue 16,  
1949, p. 148-65, - Bibliog: 19 items.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

TARUTIN, P. P.

Tarutin, P. P. - "On the power necessary for the operation of rolling machinery in the milling of varieties of wheat", Trudy Vsesoyuz. nauch.-issled. in-ta zerna i produktov ego pererabotki, Issue 18, 1949, p. 56-61.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

SHNEIDER, Ya.A., inzhener-ekonomist [author]; TARUTIN, P.P., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk [redaktor].

[Hauling bulk flour by truck] Opyt organizatsii bestarnykh perevozok muki avtotransportom. Pod red P.P.Tarutina. Moskva, Gos.izd-vo tekhn.i ekon. lit-ry po voprosam zagotovki, 1952. 57 p.

(MLBA 6:8)

(Flour--Transportation)

TARUTIN, P.P.

AYZIKOVICH, Leonid Yefimovich, kandidat tekhnicheskikh nauk; KHORTSEV, Boris  
Nikelayevich, inzhener, laureat Stalinskoy premii; TARUTIN, P.P.,  
kandidat tekhnicheskikh nauk, laureat Stalinskoy premii, redaktor;  
GEL'MAN, D.Ya., redaktor; LABUS, G.A., tekhnicheskij redaktor;  
OILNENSON, P.O., tekhnicheskij redaktor

[Technology of wheat and rye flour milling] Tekhnologiya proizvod-  
stva pshenichnoy i rzhanoi muki. Moskva, Izd-vo tekhn. i sven. lit-  
ry po voprosam zagotovki, 1954. 518 p. (MIRA 8:5)  
(Wheat milling)

TARUTIN, P., kandidat tekhnicheskikh nauk.

Theory and practice of grain conditioning; unsolved problems.  
Muk.-elev.prom. 20 no.5:14-16 My '54. (MLRA 7:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produk-  
tov ego pererabotki.  
(Grain milling)



1. The first of the three items listed below is a copy of the report of the first of the three items listed below. The second of the three items listed below is a copy of the report of the second of the three items listed below. The third of the three items listed below is a copy of the report of the third of the three items listed below.

**TARUTIN, P., kandidat tekhnicheskikh nauk.**

Rapid conditioning of wheat. Muk.-elev.prom. 21 no.2:16-19  
P '55. (MIRA 8:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov i produktov ego pererabotki.  
(Wheat)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755020015-5  
KUPRITS, Ya.N.; TARUTIN, P.P.; PAL'TSEV, V.S.; KHUSID, S.D.

In memory of P.A.Koz'min. Muk.-elev.prom.22 no.3:32 Nr '56.  
(Koz'min, Petr Alekseevich, 1871-1936) (MLRA 9:7)

KRAVCHENKO, I.D.; TARUTIN, P.P., spetsred.; VASIL'YEVA, G.N., red.;  
MUSTAFIN, A.M., tekhn.red.

[Quality milling of wheat in a single stand mill] Sortovye  
pomoly pshenitsy na odnostankovoi mel'nitse. Moskva, Pishche-  
promizdat, 1957. 37 p. (MIRA 12:4)  
(Wheat milling) (Flour mills)

DELIDOVICH, V.N.; KREYMERMANN, G.I.; MAMBISH, I.Ye.; TANUTIN, P.P.

Review of V.F. Bublii and V.A. Pylin's book "Storage and processing  
of grain in the manufacture of alcohol." Spirt. prom. 24 no.2:37-  
39 '58. (MIRA 11:3)

(Grain) (Bublii, V.F.) (Pylin, V.A.)

VORONTSOV, Oleg Samoylovich, dots., kand. tekhn. nauk; Priniali uch.: SHUMSKIY, O.D., dots.  
kand. tekhn. nauk; CHERNILOV, L.O., inzh., prepodavatel'; RYSIN,  
P.I., prepodavatel'; TARUTIN, P.P., starshiy nauchnyy sotr.,  
kand. tekhn. nauk, red.; KRIVYAKIN, B.I., red.; GOLUBKOVA, L.A.,  
tekhn. red.

[Elevators, granaries, and grain processing enterprises] Elevatory,  
sklady i zernopererabatyvalushchie predpriatiia. Pod red. O.D.  
Shumskogo i P.P. Tarutina. Moskva, Izd-vo tekhn. i ekon. lit-ry po  
voprosam khleboproduktov. Pt. 1. [Types, constructional features and  
operation] Tipy i konstruktsii sooruzhenii i ikh ekspluatatsiia.  
(MIRA 14:8)  
1961. 269 p.

1. Novocheboksakiy elevatorny tekhnikum (for Chernilov). 2. Moskov-  
skiy politekhnikum (for Rysin)  
(Grain elevators) (Flour mills)

NIKOLAYEV, R.P.; TARUTIN, P.P.; ROMANOVA, A.F.

Powdered stabilized vitamin A concentrate for feeding  
purposes. Vit. res. i ikh isp. no.6:145-155 '63.

(MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut  
i Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i  
produktov yego pererabotki.

(A)

SOURCE CODE: UR/0286/65/000/021/0041/0041

ACC NR: AP6000346

AUTHORS: Nikolayev, R. P.; Tarutin, P. P.; Romanova, A. F.; Brzhezina, L. K. 21

ORG: none B

TITLE: Method for manufacturing a vitaminized animal fodder preparation. Class 30, No. 176043

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 41

TOPIC TAGS: food technology, commercial animal, vitamin, calcium compound, nicotinic acid

ABSTRACT: This Author Certificate presents a method for manufacturing a vitaminized animal fodder preparation containing vitamin A, molasses, and soybean meal. To insure complete vitaminization of the preparation, riboflavin (B<sub>2</sub>), nicotinic acid (PP), and calcium pantothenate are dissolved in the molasses. Next, stabilized vitamin D is emulsified in the molasses, and vitamin B<sub>12</sub> and soybean meal are added to the mixture. The mixture is thoroughly mixed, crushed, and bagged.

SUB CODE: 02/  
13/

SUBM DATE: 17Aug63

HW

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UDC: 636.085:636.087.3:577.161.164



TARUTIN, V.A.

Some peculiarities of the methods of aerogeophysical prospecting  
for radioactive ores in gently sloping platform sedimentary  
formations. Vop. rud. geofiz. no.5:40-48 '65.

(MIRA 18:9)

APPROVED FOR RELEASE: Thursday, September 26, 2002  
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CIA-RDP86-00513R001755020015-5  
CIA-RDP86-00513R001755020015-5"

TARUTIN, V. Ya.

Min higher education USSR. Moscow aviation technological inst.

TARUTIN, V. Ya.- "Hydrodynamic investigation of the process of casting large thin-walled parts." Min Higher Education USSR. Moscow Aviation Technological Inst. Moscow, 1956.  
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956.

STEBAKOV, Ye.S., kand.tekhn.nauk; TARUTIN, V.Ya., kand.tekhn.nauk; GOLOVIN,  
S.Ya., inzh.

Power presses or foundry machines? Vest. mash. 38 no.9:27-28  
S '58. (MIRA 11:10)

(Molding (Founding))

1.1500

(2508, 2808, 1555)  
25834

S/536/61/000/049/002/003  
E111/E435

AUTHORS: Tarutin, V.Ya., Candidate of Technical Sciences,  
Stebakov, Ye.S., Candidate of Technical Sciences

TITLE: "Squeezing-out" casting and its fluid-dynamic  
principles

PERIODICAL: Moscow, Aviatsionnyy tekhnologicheskii institut.  
Trudy. No.49, 1961, pp.24-26. Voprosy tekhnologii  
liteynogo proizvodstva

TEXT: The authors discuss first the difficulties of filling a  
relatively long (in the direction of metal flow) mould of wide, thin  
cross section. They consider the growth in loss of head of the  
metal flowing to fill a mould to produce a flat, thin panel, using  
the ordinary method. Assuming that the metal front advances  
unbroken over the whole cross section they apply the flow equations  
valid for the horizontal movement of a viscous fluid between two  
parallel walls. They further assume that the process is isothermal  
and in a steady state. They obtain for the difference in pressure  
 $P_1 - P_2$  between two points along a casting of the length  $l$ :

$$P_1 - P_2 = 12 \frac{\mu}{t} \left( \frac{l}{b} \right)^2$$

(8)

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E111/E435

"Squeezing-out" casting 25834

where  $\mu$  is the kinematic viscosity,  $\delta$  the wall thickness and  $t$  the transit time of a given particle over the length  $l$ . The relation between  $P_1 - P_2 / K \cdot 10^3$  and  $\delta$  is shown in Fig.4,  $K$  being  $12\mu/t$ ,  $l = 500$  mm and the initial thickness  $\delta_0 = 6$  mm. It is pointed out that since in practice conditions are not isothermal, the difficulties are greater than the theoretical treatment suggests. Loss of head can be reduced by: using smoother walls and reducing air pressure (not very effective); preheating the mould (leads to defects); pressure casting; moving the mould to correspond to the advance of the crystallization front (the "successive crystallization method"); using moulds whose cross sections can be reduced after filling with metal and, when only a thin layer has solidified on the walls, the excess metal is squeezed out (the "squeezing-out" method). The last three are all being used in the USSR to master the casting of large thin-walled parts. The last was proposed by Engineer Ye.S.Stebakov, in 1951. It is discussed in detail in the present article. The arrangement is shown in Fig.5 (1 base, 2 stationary side, 3 supporting bracket, 4 intermediate base, 5 sand core, 6 material, 7 side jaw, 8 movable side). The rate of movement can be

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"Squeezing-out" casting 25834

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according to a pre-set programme. The relation between the rate of flow of metal in the mould,  $v_r$  cm/sec, and the angle between the two sides (degrees) is shown in Fig.9 for a wall thickness of 1 mm and a constant angular velocity  $\omega$ . To derive the relation between metal flow rate and  $\omega$  the authors consider the simpler case of a flat diffuser with one fixed and one movable wall. Solving a system of differential equations they derive Eq.(11) where  $A$  is a constant depending on the slope of the stationary wall  $\beta$ , on the original divergence angle of the diffuser  $\alpha_0$  and the original level of metal  $r_0$ ,  $\alpha$  is the divergence angle and  $\varphi$  is the angle between the radius vector  $r$  and the stationary wall.

$$v_r = \frac{\omega A}{\alpha^2 \sin^2 \alpha \sqrt{\cos \beta + \sin \beta \cot \alpha}} \left(1 - \frac{\varphi}{\alpha}\right) \varphi \quad (11)$$

For the range  $\alpha = 10'$  to  $8^\circ$ , the average flow-rate is given by the simplified expression  $\omega A' / \sin^2 \alpha$ , which is useful for calculating Reynolds numbers and the required values of  $\omega$ . For casting 2200 x 80 panels 2.5 to 3 mm thick, 6 to 8 sec are Card 3/6

"Squeezing-out" casting 25834

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required. High temperature and velocity gradients are obtained near the walls and crystallization conditions are very favourable; gas and non-metallic inclusions acquire a spin which will tend to move them into the fastest-moving stream. The trajectory of a gas bubble is given by Eq.(17)

$$\left. \begin{aligned} x &= x_0 + 2\omega y t \\ y &= \frac{\delta}{2} \sin \pi \left(1 - \frac{t}{2}\right) \end{aligned} \right\} \quad (17)$$

where  $x_0$  is the  $x$  coordinate when  $t = 0$ ,  $t$  is time,  $\omega$  is angular velocity of rotation of gas inside the bubble,  $\delta$  is the wall thickness of the casting,  $y$  is distance from the wall (from 0 to  $\delta/2$ ). The authors note that the departments of MATI are carrying out intensive research on this process, which can produce enormous castings with 2 to 3 mm thick walls. The mastering of the method has clearly shown the economic desirability of its wide adoption. There are 20 figures.

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STEBAKOV, Yemel'yan Semenovich; TARUTIN, Vasilii Yakovlevich; BALANDIN,  
G.F., kand. tekhn. nauk, retsenzent; KRYLOV, V.I., inzh., red.;  
CHERNYAK, O.V., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Compression casting] Lit'e vyzhimanem. Moskva, Mashgiz, 1962.  
250 p. (MIRA 15:3)

(Founding)

TARUTIN, V.Ya., kand. tekhn. nauk

Hydrodynamic investigation of the process of casting thin-walled cylindrical sections into half-molds converging in parallel. Trudy MATI no.56:171-191 '63. (MIRA 16:6)

(Founding) (Fluid dynamics)

AKHMEDOVA, Z.P. [Akhmedava, Z.P.]; DOBINA, I.A.; TARUTINA, L.A. [Tarutsina,  
L.A.]; TURBIN, N.V. [Turbin, M...]; KHATYLOVA, L.V. [Khatylova, L.V.]

Change in the rate of ripening and heterosis of corn under various  
cultivation conditions. Vestsi AN BSSR Ser. biol. nav. no. 3:54-64  
'64. (MIRA 18:1)

TURBIN, N.V.; TARUTINA, L.A. [Tarutsina, L.A.]; KHOTYLEVA, L.V.  
[Khatyliova, L.V.]

Results of testing mathematical models for the determination  
of combining ability. Vestsi AN BSSR. Ser. biial nav.  
no.1:74-81 '65. (MIRA 18:5)

CTARUTINA, L.I.

Absorption of supersonic waves in gelatin solutions.  
 1. G. Mikhailov and L. I. Tarutin. *Doklady Akad. Nauk S.S.S.R.* 74, 41-47 (1950).—Absorption coeffs.  $\alpha$  were detd. by the method of diffraction of light by supersonic waves. At room temp., at a frequency  $\nu = 10.59$  Mc., concn. of gelatin  $c = 0, 1.5, 3.0, 5.0, 7.0\%$ ,  $\alpha = 0.000 \pm 0.002, 0.049 \pm 0.003, 0.082 \pm 0.003, 0.089 \pm 0.012, 0.090 \pm 0.010$  cm.<sup>-1</sup>, and  $10^4 \alpha/\nu^2 = 28 \pm 2, 48 \pm 3, 76 \pm 3, 86 \pm 11, 84 \pm 9$ , i.e., increasing with  $c$  up to about 8%. Then remaining practically const. At  $\nu = 8.2$  Mc.,  $c = 3.0$  and  $5.0$ ,  $\alpha = 0.063 \pm 0.006$  and  $0.090 \pm 0.007$ ,  $10^4 \alpha/\nu^2 = 77 \pm 8$  and  $88 \pm 10$ . Linear dependence of  $\alpha$  on the viscosity  $\eta$  evidently holds only at the lowest  $c$ , where there is no structure formation. At  $c = 1.5\%$ ,  $\alpha$  calcd. by Stokes' formula from the velocity of sound is  $\sim 800$  cm.<sup>-1</sup>; the exptl. value, 0.049. Thus at sufficiently high  $c$ , the static  $\eta$ , as measured by ordinary viscometry, does not enter into the propagation of supersonic waves. The abnormally high static  $\eta$  of lyophilic colloids is entirely due to the binding of a major part of the solvent by the micelles. The slow relaxation effects detd. by this binding can play a role only at very low frequencies. At supersonic frequencies, the significant short relaxation times may be linked, not with the slow displacement of micelle-solvent complexes, but with such processes as changes of shape of mols. or rotation of st. groups. The initial growth of  $\alpha$  with increasing  $c$  may be due to such processes. The leveling off of  $\alpha$  at higher  $c$  is evidently due to formation of a rigid structure by spatial cross-linking. Absorption of supersonic waves at this stage

may be detd. by deformation or orientation of relatively short parts of the spatial net work. The fact that at  $c = 3$  and  $5\%$  the quadratic dependence of  $\alpha$  on  $\nu^2$  is preserved indicates that in this range  $\omega\tau$  is less than 1, i.e. the relaxation time  $\tau$  is short. This and the very high content of H<sub>2</sub>O in the gel account for the independence of  $\alpha$  of  $c$ , and for the small difference in  $\alpha$  between the gel and the pure solvent.  
 N. Thon

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5(3),7(3)

AUTHOR:

Tarutina, L. I.

SOV/75-14-4-26/30

TITLE:

Quantitative Analysis of the Copolymer Content of Tetrafluoro Ethylene With Trifluoro Ethylene by Infrared Spectroscopy

PERIODICAL:

Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 504-505 (USSR)

ABSTRACT:

The described method for the determination of the composition of the copolymer from tetrafluoro ethylene ( $\text{CF}_2 = \text{CF}_2$ ) and trifluoro ethylene ( $\text{CF}_2 = \text{CFH}$ ) utilizes the differences in the spectra of polytetrafluoro ethylene and polytrifluoro ethylene in the absorption of the C-H-bonds. The measurements were conducted with an instrument type IKS-11 with lithium fluoride prisms (for the range  $2900\text{--}3100\text{ cm}^{-1}$ ) and sodium chloride prisms (for the range around  $750\text{ cm}^{-1}$ ). The absorption bands of the C-H-bond in polytrifluoro ethylene and in the copolymers is at  $2987\text{ cm}^{-1}$ . As polytetrafluoro ethylene is pervious at  $2987\text{ cm}^{-1}$  the total absorption of the copolymer is caused only by one component

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Quantitative Analysis of the Copolymer Content of SOV/75-14-4-26/30  
Tetrafluoro Ethylene With Trifluoro Ethylene by Infrared Spectroscopy

(trifluoro ethylene). Based on the spectrum of a film of polytrifluoro ethylene a diagram is made for the dependence of the optical density in the maximum of the band at  $2987\text{ cm}^{-1}$  ( $D_0$ ) on the thickness of the film ( $d_1$  in microns). The optical density of  $1\mu$  thickness is  $D = 0.170$ . Subsequently the optical density of the copolymer has to be determined at the maximum of the band at  $2987\text{ cm}^{-1}$  and thus the effective thickness  $d_1$  of the trifluoro ethylene in the copolymer film can be read from the diagram. This method depends on two conditions: 1) that the volume of the copolymer is composed of the volumes of the two polymer components; 2) that the absorption of the C-H-groups is identical in the spectrum of the polytrifluoro ethylene and in the spectrum of the copolymer. The permissibility of these two conditions was proved by the good results obtained in the analysis of artificial gauging samples of the copolymer. The composition of the gauging samples was determined by analysis of the gaseous mixture of the two monomers (tetrafluoro ethylene and trifluoro ethylene).



Quantitative Analysis of the Copolymer Content of      SOV/75-14-4-26/30  
Tetrafluoro Ethylene With Trifluoro Ethylene by Infrared Spectroscopy

Trifluoro ethylene has an absorption band at  $750\text{ cm}^{-1}$  at which tetrafluoro ethylene does not absorb. A diagram was made of the dependency of the optical density of the mixture in the absorption maximum at  $750\text{ cm}^{-1}$  on the trifluoro ethylene content of the mixture (Fig 4). One table shows the comparison of the results obtained in the analysis of the copolymers with the described method and the results obtained by two other determination methods. The accordance of the results proves that the intensity of the absorption bands of the C-H-groups of trifluoro ethylene in the copolymers remains constant. The author thanks V. M. Chulanovskiy for his interest in this paper, G. I. Lapotnikova for her help in the measurements and S. G. Malkevich for putting at his disposal the samples of the copolymers and the gaseous mixtures. There are 4 figures, 1 table, and 1 Soviet reference.

ASSOCIATION: Nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass,  
Leningrad (Scientific Research Institute of Polymerization  
Plastics, Leningrad)

SUBMITTED: April 10, 1958  
Card 3/3

7(3),5(4),24(7)

AUTHOR: Tarutina, L.I.

SOV/48-23-10-15/39

TITLE: The Use of Infrared Absorption Spectra for the Investigation of the Structural Changes of Some Fluoroplastics Subjected to Aging

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 10, pp 1210-1212 (USSR)

ABSTRACT: Several new plastics having high temperature resistivity and a high resistivity to aggressive media are: polytrifluoroethylene (1), polytrifluorochloroethylene (2), as well as the copolymers of tetrafluoroethylene with ethylene (3) and of vinylidene fluoride with trifluorochloroethylene (4). At certain temperatures they, however, show signs of aging, which were investigated in the present paper (spectroscope of the type IKS-11, film thickness  $\sim 100\mu$ ). It was found that thermal aging above all results in a tearing of the C-Cl, C-H, or C-F and C-H bonds. The investigations carried out of the individual plastics are discussed separately. (3): aging in air and in a vacuum at 200, 240 and 290°.

Absorption band at  $1390\text{ cm}^{-1}$ . Aging in air leads to a coloring of (3) and to the occurrence of new bands at 1615, 1677, 1755 and  $1780\text{ cm}^{-1}$  (Table, Fig 1). In the case of aging in a vacuum no

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The Use of Infrared Absorption Spectra for the SOV/48-23-10-15/39  
Investigation of the Structural Changes of Some Fluoroplastics Subjected to  
Aging

bands within the range  $1600 - 1900 \text{ cm}^{-1}$  were observed. (1):  
thermal aging at  $240^{\circ}$ . Occurrence of a band at

$1767 \text{ cm}^{-1}$  ( $\text{C}=\text{O}$  oscillations in the group  $\text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{H} \end{array}$ ); increase in the

intensity of the band with  $2987 \text{ cm}^{-1}$  ( $\text{C}-\text{H}$  valence oscillations).  
In the case of aging in the vacuum the former did not occur.

(4): Agings at  $200^{\circ}$  showed no-, and at  $250$  and  $270^{\circ}$  only slight-,  
and at  $300^{\circ}$  considerable variations of the spectrum. In the case  
of aging in the air new bands occurred:  $1614$ ,  $1787$ ,  $1760$ ,  $1721$

and  $3122 \text{ cm}^{-1}$ . The samples aged in a vacuum had only two new bands,  
the occurrence of which resulted in a decrease of intensity of  
those already existing ( $2983$ ,  $3024$ ,  $1393$ ,  $1425$ ,  $1100-1300$ ,  $970 \text{ cm}^{-1}$ ).

(2): Aging in a vacuum at  $300^{\circ}$ : two bands occur at  $1363$  and  
 $1784 \text{ cm}^{-1}$  (connected with the formation of the  $-\text{CF}=\text{CF}_2$  group).

In the case of aging in the air the band at  $1881 \text{ cm}^{-1}$  was not

The Use of Infrared Absorption Spectra for the SOV/48-23-10-15/39  
Investigation of the Structural Changes of Some Fluoroplastics Subjected to  
Aging

found. An addition of water in vacuum aging led to an intensity increase of the bands at 1363 and 1784  $\text{cm}^{-1}$ . The author finally thanks V. M. Chulanovskiy for his interest and advice, L. V. Chereshevich and S. G. Malkevich and Ts. S. Dunayevskaya for placing the samples at her disposal and for discussions. E. I. Blyumental' assisted in part of the work. There are 2 figures, 1 table, and 1 reference.

TAKUTIVA, L. I.

TABLE I BOOK EXPLANATION BOX/533

Investigations, University

Molecular Spectroscopy (Molecular Spectroscopy) [Leningrad] Izdat-vo  
 Leningr. univ., 1960. 138 p. 4,700 copies printed.

Book, M. I. P. L. Serikov, Eds.: Dr. V. Shchegolev and V. D. Plavov  
 Tech. M. I. P. L. Serikov.

FOREWORD: This collection of articles is intended for scientific workers,  
 instructors and students of physics and chemistry. It may also be used  
 by engineers and technicians employing molecular spectroscopy.

CONTENTS: The collection of articles describes spectroscopic studies of  
 liquids and solutions, and includes data on applied molecular spectroscopy.  
 Individual articles deal with the molecular interaction in solutions, and  
 specifically with the hydrogen bond problem. Works on the optical utiliza-  
 tion of spectral apparatus and on the analytical application of molecular  
 spectroscopy are also included.

Aspects of the structure of high and low molecular compounds and of molecular  
 complexes are also covered. The collection published in honor of the 70th  
 birthday of Professor Vladimir Kibrikovich Chudakov, Soviet specialist  
 in molecular spectroscopy and optical analysis. There are no references.

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83411  
S/191/60/000/006/003/015  
B004/B054

S.3830

AUTHORS:

TITLE:

Malkevich, S. G., Tarutina, L. I., Chereshevich, L. V.  
Spectroscopic Investigation of the Structure and Thermal  
Aging of the Copolymer From Tetrafluoro Ethylene and  
Ethylene //

PERIODICAL: Plasticheskiye massy, 1960, No. 6, pp. 5 - 7

TEXT: The authors studied the thermal stability of the copolymer  $(-\text{CF}_2-\text{CF}_2-\text{CH}_2-\text{CH}_2-)_n$ . Films 60-80  $\mu$  thick or powdered copolymer were heated to 200, 240, 275, and 290°C in the presence of air or in vacuum ( $10^{-3}$  torr). The structural changes were observed by means of an infrared absorption spectrum taken on an MKC-11 (IKS-11) apparatus with NaCl prism. At 200°C, the spectra were not changed even after 300 h. The authors found that the copolymer samples exhibited differently strong branching which became evident in the intensity of the 1390  $\text{cm}^{-1}$  band (deformation oscillations of the  $\text{CH}_2$  group)(Fig.1). After 5 h of heating to 275°C, X

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Spectroscopic Investigation of the Structure  
and Thermal Aging of the Copolymer From  
Tetrafluoro Ethylene and Ethylene

S/191/60/000/006/003/015  
B004/B054

branched samples lost in weight up to 4%. Fig. 2 shows the weight losses as a function of the intensity of the  $1390\text{ cm}^{-1}$  band. Unbranched samples were stable. Fig. 3 shows that the weight loss depends on the extent of the contact area with air. Half an hour of milling of branched samples at  $150^{\circ}\text{C}$  accelerated aging, the weight loss rose to 10%, whereas unbranched samples remained unchanged even after 1 h of milling. The difference between branched and unbranched samples becomes obvious at  $240^{\circ}\text{C}$ . While the latter show an unchanged spectrum, the spectrum of branched samples shows new bands (Fig. 4):  $1615\text{ cm}^{-1}$ ,  $1780\text{ cm}^{-1}$  (acid groups),  $1755\text{ cm}^{-1}$  (C=O valence oscillations of the carboxyl group), and a not identified  $1677\text{ cm}^{-1}$  band. Heating to  $290^{\circ}\text{C}$  accelerates the oxidation process (Fig. 5) while hydrogen fluoride is set free. The separation of HF becomes evident in new absorption bands:  $1720\text{ cm}^{-1}$  (C=C stretching vibrations),  $1850\text{ cm}^{-1}$  (dehydrogenated fluorine groups), and  $3116\text{ cm}^{-1}$  (stretching vibrations of the -C-H group); thus, the authors assume a

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Spectroscopic Investigation of the Structure and Thermal Aging of the Copolymer From Tetrafluoro Ethylene and Ethylene S/191/60/000/006/003/015 B004/B054

formation of  $-CF=CH-$  groups. The destruction also becomes evident in a reduction of viscosity of the melt and a lowering of the softening temperature (Table). No double bonds were observed when heating in vacuo. Viscosity and softening temperature increased. The authors thank Professor V. M. Chulanovskiy for advice, I. A. Marakhonov for viscosity determinations, A. I. Korniyushina for production of preparations, and G. I. Lapotnikova for taking the spectra. There are 5 figures, 1 table, and 4 references: 2 Soviet, 1 US, and 1 British. X



15.8160

33386

S/190/62/004/002/017/021  
B110/B101

11.2214  
AUTHORS:

Tarutina, L. I., Dunayevskaya, Ts. S.

TITLE:

Spectroscopic study of structural changes in polytrifluoro  
chloro ethylene during thermal aging

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 2, 1962, 276-281

TEXT: To study the structural changes occurring during thermal aging at 270, 290, 300, 330, and 350°C in air and vacuo in polytrifluoro chloro ethylene (I), the infrared absorption spectra between 4000 and 700  $\text{cm}^{-1}$  were taken by a Hilger spectrometer. Aging in vacuo was conducted in the form of powder and 100 $\mu$  (spectral range between 4000 and 1300  $\text{cm}^{-1}$ ) and 3-5 $\mu$  thick films (spectral range between 1300 and 750  $\text{cm}^{-1}$ ). New absorption bands appeared at 1780, 1360, 1310, and 898  $\text{cm}^{-1}$ . The band at 1780  $\text{cm}^{-1}$  proves the C=C bond, that at 1360  $\text{cm}^{-1}$  the C-F bond of the  $\text{CF}_2$  group, that at 1310  $\text{cm}^{-1}$  the C-F bond of the -CF- group. This suggests

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S/190/62/004/002/017/021  
B110/B101

Spectroscopic study of...

the process:  $-CF(Cl)-CF_2-CFCl-CF_2- \longrightarrow -CF-CF_2 + CFCl_2-CF_2-$ . The absorption band at  $900\text{ cm}^{-1}$  confirms the C-Cl bond of the  $-CFCl_2$  group.

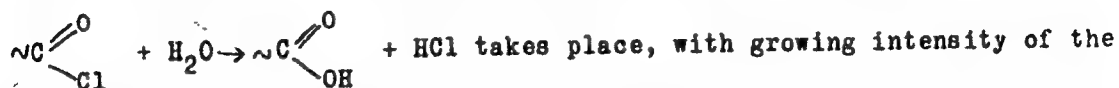
Chlorine and fluorine are separated during aging. The number of double bonds grows linearly with the heating time after 100-hr aging at  $300^\circ\text{C}$ . Since the separated gases are not removed, the decomposition products do not affect the decomposition rate of the polymer. The changes of spectra of polymers aged at  $270^\circ$ ,  $300^\circ$ ,  $330^\circ$ , and  $350^\circ\text{C}$  resemble each other. Thus, all temperatures effect the same aging mechanism: sharp increase of the decomposition rate, and increase in number of double bonds. Destruction of I at  $\geq 350^\circ\text{C}$  effects formation of the monomer and of a mixture of low-molecular polymers. On chlorine or fluorine treatment of the mixture, the bands at  $1780$ ,  $1360$ , and  $1310\text{ cm}^{-1}$  disappear by saturation of double bonds. Polymers aged at  $330$  and  $350^\circ\text{C}$  still show a band at  $1705\text{ cm}^{-1}$  whose intensity also decreases after Cl or F treatment. This suggests formation of double bonds in the chain center due to cleavage of Cl or F without chain rupture; the probability of double bonds grows with increasing aging temperature. Bands are formed at  $1875$ ,  $1805$ , and  $1770\text{ cm}^{-1}$  after 5 hrs aging in air at  $330^\circ\text{C}$ . The band at  $1875\text{ cm}^{-1}$  belongs to the

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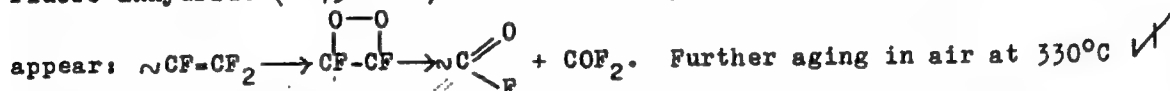
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 S/190/62/004/002/017/021  
 B110/B101

Spectroscopic study of...

C=O bond in  $\begin{array}{c} \text{O} \\ \diagup \\ \text{C} \\ \diagdown \\ \text{F} \end{array}$ . After 3-hr boiling in water the reaction



1770  $\text{cm}^{-1}$  band which corresponds to the C=O bond of the carboxyl group. After 1 and 7 hrs aging in air of samples previously heated in vacuo for 5 hrs, the intensity of the band of double bonds (1780  $\text{cm}^{-1}$ ) decreases; fluoro anhydride (1875  $\text{cm}^{-1}$ ) and chloro anhydride bands (1805  $\text{cm}^{-1}$ )



effects a decrease in intensity of the fluoro anhydride bands, and increasing carboxyl bands. During aging at 300°C, some samples are weakly oxidized which depends on the method of production. The authors thank V. M. Chulanovskiy, L. V. Chereshevich for interest, L. I. Gracheva and Z. F. Karpova for assistance. There are 6 figures, 2 tables, and 6 non-

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33386

S/190/62/004/002/017/021  
B110/B101

Spectroscopic study of...

Soviet references. The four most recent references to English-language publications read as follows: C. R. Jianotta, *Plastics*, 18, 166, 1953; S. Liang, S. Krimm, *J. Chem. Phys.*, 25, 563, 1956; M. Iwasaki et al. *J. Polymer Sci.*, 25, 377, 1957; C. L. Madorsky, S. Straus, *J. Res. Nat. Bur. Standards*, 55, 223, 1955.

ASSOCIATION: Nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass (Scientific Research Institute of Polymerized Plastics)

SUBMITTED: February 11, 1961

S/048/62/026/010/013/013  
B117/B186

AUTHORS: Chulanovskiy, V. M., Gol'denberg, A. L., Pirozhnaya, L. N.,  
Popova, G. S., Tarutina, L. I., and Fratkina, G. P.

TITLE: Spectral examination of the aging processes of polymers

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,  
v. 26, no. 10, 1962, 1316-1317

TEXT: Infrared spectroscopy was examined for its applicability to investigating the aging and stabilization of polymers (e.g., high-density and low-density polyethylene, ethylene - propylene copolymer, fluorine polymers, PVC, polyvinyl alcohol and its acetals, copolymers on the basis of styrene). Conclusions: For the purpose of investigating the oxidation of polymers, infrared spectroscopy is more suitable than chemical analysis as it can be used to determine carbonyl groups in various types of compounds (e.g., in acids, aldehydes, ketones, and ether compounds), to establish the point of saturation of OH and CO groups, to observe the decomposition of the main groups, and to analyze the products of decomposition. Results of work in this field will be published later.

Card 1/1

TARUTINA, I.I.

Spectrochemical method of interpretation of carbonyl  
absorption bands in spectra of fluorinated polymers.  
Zav.lab. 28 no.42442 444 '62. (MIRA 15:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut  
polimerizatsionnykh vlastiass i Eksperimental'nyy zavod.  
(Polymers - Spectra) (Carbonyl group)  
(Spectrochemistry)

KREYTSER, T.V.; TARUTINA, L.I.

Study of the structure transformations of trifluorostyrene  
with the aid of absorption spectra, Zav. lab. 29 no.6:702-704  
'63. (MIRA 16:6)

1. Nauchno-issledovatel'skiy institut polimerizatsionnykh  
plastmass.

(Styrene—Absorption spectra)

TARUTINA, L.M., inzh.

Devices for gas analysis. Khim. i nef. mashinostr. no.6:38-40  
D '64 (MIRA 18:2)



ZNAMENSKIY, V.V.; RYABINKIN, L.A.; PETROV, L.V.; VARTANOV, S.P.;  
GAGEL'GANTS, A.A.; KOTLYAREVSKIY, B.V.; LOZOY'SKAYA, I.F.;  
LYAKHOVITSKIY, F.M.; MAR'IN, N.I.; OSTROVSKIY, V.D.; PARIY'SKAYA,  
G.N.; RIKHTER, V.I.; RUBO, V.V.; SLUTSKOVSKIY, A.I.; TARUTS,  
G.M.; TURCHANENKO, N.M.; SHMIDT, N.G.; SHNEYERSON, M.B.; GURVICH,  
I.I., red.; BORUSHKO, T.I., red. izd-va; GUROVA, O.A., tekhn. red.

[Instructions for seismic prospecting] Instruktsiya po seismoraz-  
vedke. Moskva, Gosgeoltekhizdat, 1962. 95 p. (MIRA 15:12)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr.  
(Seismic prospecting)

NALIVKIN, V.D.; OSTRIY, G.B.; TARUTS, G.M.; SHABLINSKAYA, N.V.

Disjunctive disturbances in the sedimentary cover of the  
West Siberian Plateau. Dokl. AN SSSR 158 no.6:1329-1332  
G '64. (MIRA 17:12)

1. Predstavleno akademikom A.A. Trofimukom.

PA 42/49793

USSR/Radio Receivers  
Public Address Systems

Apr 49

"Radiofication of Rural Localities," N. Taruts,  
2 pp

"Radio" No 4

Four types of units which may be used in radiofication work are: (1) wind-powered receiver-PA system of the RTU-20 (20 watts) type which serves up to 120 "Rekord"-type loud-speakers, (2) the UK-50 (50 watts) type receiver-PA system which normally supplies 200 - 250 "Rekord"-type loud-speakers and one 10-watt street loud-speaker (P-10), (3) the RTU-100 (combined transmission unit--100 watts) which supplies up to

42/49793

USSR/Radio Receivers (Contd)

Apr 49

400 "Rekord"-type loud-speakers and two street loud-speakers (P-10), and (4) the TUB-100 (transmission unit -- 100 watts by battery) for localities lacking electric power sources.

TDB

42/49793

TARVAVSCHI, Ion T.; RADULESCU, Didona

Cytological and morphologic studies of some hybrid plants of *Solanum lycopersicum* L. Studii cerc biol veget 12 no.3:281-298 '60.  
(EEAI 10:5)

(Hybridization) (Tomatoes)

TARVERDIYEV, I.

Increase control over commodity turnover. Fin. SSSR 20 no.7:50-52  
Jl '59. (MIRA 12:11)

1. Nachal'nik upravleniya gosdokhodov Ministerstva finansov  
Azerbaydzhanskoy SSR.  
(Azerbaijan--Finance)

TARVERDIYEV, R.B.

Erosion of the banks of Mingachaur Reservoir. Izv. AN Azerb. SSR no. 5:  
101-106 My '57. (MLRA 10:8)  
(Mingechaur Reservoir--Coast changes)

**TARVERDIYEV, R.B.**

Transparence and color of water in Mingechaur Reservoir. Izv.  
AN Azerb. SSR no.8:89-95 Ag '57. (MIRA 10:9)  
(Mingechaur Reservoir--Hydrology)

**TARVERDIYEV, R.B.**

Water balance of the Mingechaur Reservoir in the initial stage of its filling. Dokl. AN Azerb. SSR. 14 no.4:319-322 '58. (MIRA 11:5)

1. Institut zoologii AN AzerSSR. Predstavleno akademikom AN AzerSSR A.N. Derzhavinyu.

(Mingechaur Reservoir)



TARVERDIYEV, R. M., Cond Geog Sci -- disc "Hydrology of the Vin-  
gechoursk Reservoir." Baku, Publishing House of the Azerbaijanian  
State U, ~~1959~~, 16 pp (Min of Higher Education, Azerbaijan State Univ. S. M. Kiran)  
1959, 150 copies (KL, 32-59, 102)

TARVERDIYEV, R.B.

Regional conference on the types and classification of reservoirs  
in the southern part of the U.S.S.R. Izv. AN Azerb. SSR. Ser.  
geol.-geog. nauk no.6:94-95 160. (MIRA 14:3)  
(Reservoirs)

TARVERDIYEV, R.B.

Annual cycle of water temperature in the Mingeaur  
Reservoir [in Azerbaijani with summary in Russian].  
Dokl.AN Azerb.SSR 16 no.1:41-43 '60. (MIRA 13:6)  
(Mingeaur Reservoir--Temperature)

ZAMANOV, Kh.D.; TARVERDIYEV, R.B.

Thermal characteristics of the Greater Caucasus lakes (in Azerbaijan).  
Izv.AN Azerb.SSR. Ser.geol.-geog nauk i nefti no.5:155-167

'61.

(MIRA 15:1)

(Azerbaijan--Lakes---Temperature)

TARVERDIYEV, R.B.; ZAMANOV, Kh.D.

Transparency and color of mountain lake waters in the Great  
Caucasus. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.4;  
111-117 '64.

(MIRA 17:12)

TARVERDIYEV, R.B.

Thermal characteristics of reservoirs in the Lenkoran' natural  
area. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.2:130-  
136 '65.  
(MIRA 18:8)

TARVERDIYEV, R.B.

Regionalization and naming constituent parts of reservoirs  
in the U.S.S.R. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk  
no. 2: 107-112 '64. (MIRA 18:11)

ZAMANOV, Khalil Dzhalal; TARVERDIYEV, Ramazan Bakhshaly

[Hydrologic characteristics of lakes and reservoirs of  
the Greater Caucasus] Bokuk Gafgazy kolları ve su anbar-  
larynyn hidrolozhi khususijetleri. Baky, Azerbaychan  
SSR Elmler Akademijasy Neshriyyaty, 1965. 137 p. [In  
Azerbaijani] (MIRA 19:1)



**TARVERDIYNYA, M.I.**

Summer feeding of perch in some bays and shore lagoons of Lake  
Baikal. Nauch.dokl.vys.shkoly; biol.nauki no.2:25-30 '59.

(MIRA 13:4)

1. Rekomendovana kafedroy ikhtiologii Moskovskogo gosudarstvennogo  
universiteta im. M.V. Lomonosova.

(BAIKAL, LAKE--PERCH)

(FISHERS--FOOD)

MIRONOVA, N.V.; TSEYEB, R.Ya.; GERASIMOV, V.V.; POZDNIYAKOV, Yu.F.;  
CHINARINA, A.D.; TARVERDIYEVA, M.I.; BELOVA, A.V.

Distribution and some biological characteristics of commercial  
fishes in the littoral area of the Murman Coast in 1958.  
Trudy MMBI no.4:174-185 '62. (MIRA 15:11)

1. Laboratoriya ikhtiologii (zav. - N.V. Mironova)  
Murmanskogo morskogo biologicheskogo instituta.  
(Barents Sea—Fishes)

TARVERDIYEVA, M.I.

Materials on the food of the Barents Sea cod *Gadus morhua* L.  
under experimental conditions. Vop. ikht. 2 no. 4: 703-716 '62.  
(MIRA 16:2)

1. Murmanskii morskoy biologicheskii institut AN SSSR.  
(Barents Sea—Codfish) (Fishes—Food)

BELOVA, A.V.; TARVERDIYEVA, M.I.

Materials on the feeding habits of the Arctic codling (*Boreogadus*  
said.). Trudy MBI no.5:143-147 '64. (MIRA 17:4)

1. Laboratoriya biologicheskikh osnov akklimatizatsii (zav. -  
L.I.Vasil'yev) Murmanskogo morskogo biologicheskogo instituta.

**TARVERDYAN, A.Kh., inzhener.**

Construction of hydraulic structures for the irrigation system of  
separate collective farms in the Armenian SSR. Gidr. i mel. 8  
no.8:11-16 Ag '56. (MLRA 9:9)  
(Armenia--Irrigation)

TARVERDYAN, A. Kh. Cand Agr Sci -- (diss) "Ways of Improving the  
Operation of Irrigation Systems, Modeled <sup>on</sup> Examples From the  
Araksia <sup>Plain</sup> ~~Lowland~~ of the Armenian SSR (Analysis of Performance of  
the Systems for the Period ~~of~~ 1948-1952)." Yerevan, ~~in~~ 1957.  
25 pp 20 cm. (Min of Agriculture USSR, All-Union Scientific  
Research Inst of ~~Hydraulic Engineering~~ <sup>Hydraulic</sup> Engineering and  
<sup>Improvement</sup> Land ~~Reclamation~~), 100 copies (KL, 18-57, ~~101~~ 97)

SOV/99-59-11-8/15

30(1)  
AUTHOR: Tarverdyan, A.Kh., Engineer (Yerevan)  
TITLE: A Method of Simplified Planning of Water Utilization  
...On Farms  
PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 11, pp 34-37  
(USSR)  
ABSTRACT: This article outlines a method for simplifying the process of drawing up water utilization plans at sovkhozy (state farms) and kolkhozy (collective farms); the author limits the discussion to farms in Armenia. Present methods of planning are briefly discussed by way of introduction. The author notes that in spite of an increase in irrigated land areas at a number of farms, consumption of water has fallen off in recent years, and cites the following examples: from 1950-1956 irrigated land area at the collective farm imeni Mikoyan (Echmiadzinskiy rayon), which takes its water from the Nizhne-Razdanskiy canal, increased by 494 hectares, while water consumption for 1956 was 95% of that for 1950; at state farms Nrs 3, 4, and 9 of the "Ararat" Trust this area increased by 109 hectares, while water consumption in 1956 was 103.2% that of

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SOV/99-59-11-8/15

# A Method of Simplified Planning of Water Utilization on Farms

1950; at the Getashen collective farm (Oktemberyan-skiy rayon) irrigated land area increased 5% and water consumption for 1956 was about 52% that of 1950; a figure of 85% is given for the Nalbandyan collective farm. The author states that the factors determining water consumption which enter into a plan remain quite stable. Study of water consumption and other factors at many collective and state farms for the 1950-1956 period, he says, allow simplifying the method for calculating farm water consumption. The simplified method is outlined and explained. To check the proposed method the author applies it to a number of farms (table) for the 1952-1956 five-year plan period; the following state and collective farms are listed: the Anastasavan, Shaumyan, Burastan, Norashen, Aygestan, and Verin Artashat farms in the Artashat-skiy rayon; the Shirazlu, Kuchuk-Vedi and Aygevan farms in the Vedinskiy rayon; the Nalbandyan, Getashen, Armavir, Mrgashat, Oktember, Bambakashat, Dzhanfida and sovkhos Nr 6 farms in the Oktemberyan-

Card 2/3



SOV/99-59-11-8/15

A Method of Simplified Planning of Water Utilization on Farms

skiy rayon; the kolkhoz imeni Mikoyan and sovkhoses Nrs 3, 4 and 9 in the Echmiadzinskiy rayon. The figures for water supply (1956) (see table) derived by the new method differ from those actually planned for that year by only 5-10%, permitted by the "Temporary Regulations on the Technical Operation of Irrigation Systems" approved by the Ministry of Agriculture of the USSR. A check on the accuracy of water supply computations is briefly outlined; the author concludes that the method proposed is sufficiently accurate for practical application. Graphs of water supply for 1956 to the Anastasavan and Shaumyan collective farms based on the water utilization plans and the proposed simplified method are presented for comparison (Fig 2). There are 3 graphs, 1 table and 1 Soviet reference.

Card 3/3

USSR / Human and Animal Physiology (Normal and Pathological).  
General Problems.

T-1

Abs Jour : Roz Zhur - Biologiya, No 13, 1958, No. 59963

Author : Shchukuryan, K. G.; Tovmasyan, R. A.; Tarverdyan, A. N.  
Inst : Republican Clinical Hospital of ArmSSR  
Title : Several Data on the Effect of the Irritation of the  
Vestibular Analyzer Upon the Secretory Function of the  
Stomach

Orig Pub : Sb. nauchn. tr. Resp. klinich. bol'nitsy ArmSSR, 1957,  
1, 529-531

Abstract : After rotation in the Barany chair with a speed of 10  
rev/20 sec., a parasympathetic effect appeared in 23  
and 38 subjects (increase in the quantity of gastric  
secretion and the content of total, free and bound HCl),  
in 7 persons a sympathetic effect was observed (decrease  
in secretion and acidity), and in the remaining ones  
there was no reaction to the rotation. -- T. G. Betoleva

Card 1/1

TARVERDYAN, T. N., KOLABSKIY, N. A., CHIZH, A. N. and GAIDUKOV, A. KH.

"The Development of a Method of Conserving Blood with a View to Retaining in it the Viability of the Dog Piroplasmosis and Cattle Babielliosis Virus."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Leningrad Veterinary Institute and Leningrad Institute of Blood Transfusion

KOLABSKIY, N.A.; BARSUKOVA, T.M.; SUZ'KO, S.F.; TARVERDYAN, T.N.

Comparative evaluation of the therapeutic properties of some preparations against coccidiosis in chicks. Veterinariia 39 no.7:54-56  
Jl '62. (MIRA 18:1)

1. Leningradskiy veterinarnyy institut.

TAI VED, 9

(4)

Oxidation of furan to maleic anhydride by atmospheric oxygen in vapor-gas phase over a catalyst from oxides of vanadium. P. Kalina, S. Iljars, and M. Tarvid. Latvian P.S.R. Zinatnu Akad. Vestis 1951, 443-44. Passage of air-furan mixts. through a glass tube over  $V_2O_5$ -pumice catalyst gave the following conversions to maleic anhydride. The best results are had with 3 sec. contact and a molar ratio of air to furan of 120-100 at 325°, when an 81-3% yield is secured (92-4% taking into account unreacted furan). It is suggested that the reaction proceeds by formation of the 2,5-di-HO deriv., which yields the 2,5-oxo deriv. or suffers ring cleavage with formation of  $HO_2CCH_2CH_2CH_2CO_2H$ , which yields a lactone. Over a pure  $V_2O_5$  catalyst some 27% furan is oxidized to  $CO_2$ - $H_2O$  and only 13% yields maleic anhydride; when the catalyst is fully "developed" with use and consists largely of  $V_2O_5$ , some 46% conversion to maleic anhydride occurs. The high yields cited above result from a catalyst consisting of both  $V_2O_5$  and  $V_2O_4$ . G. M. K.

mf



TARVID, M. V.

TARVID, M. V. -- Investigation of the Vapor-phase Oxidation of Furfurol with Oxygen of the Air Over Different, Mixed Vanadium Oxide Catalysts." Acad Sci Latvian SSR, Inst of Forest Problems, 1952. In Latvian (Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Izvestiya Ak. Nauk Latvyskov SSR, No. 9, Sept., 1955

Anti tuberculosis activity of a preparation with monicotinoyl hydrazid. S. Inders, M. Ludak, M. Berkova, and M. Tarvidu. *Labijsk Zashita Akad. Serbi* 1952. No. 10 (Whole No. 63), 117 (in Russian). - Prepn. IN 73, n = 100 2°, was obtained from the so-called 3-pyridine fraction of the pyridine base from a phenol plant by oxidation with  $KMnO_4$  or  $H_2SO_4$  with  $2CrO_3$ , or in vapor phase with air over V catalysts, with subsequent esterification with EtOH, and reaction with  $NH_2NH_2 \cdot H_2O$  to form a salt of hydrazides. The prepn. had bacteriostatic activity in 3% glycerin bouillon cultures of several *Mycobacteria* in diln. of  $1:6 \times 10^7$  as compared to  $1:8 \times 10^8$  for the pure monicotinic acid hydrazide. Andrew Dravnieks

... with an oxygen stream. The catalysts, and P. L. ...  
... ~~PSR-2000-1-1200-1952~~ ... (Whole No. 64), 57-54 ...  
cat tests, with and without support, were investigated for their activity in catalyzing the oxidation of furfural vapor to maleic acid with air at 1 atm. pressures and 200-375° F. per catalysts were: V<sub>2</sub>O<sub>5</sub> on pumice, 5 g; on Al, 10 g per 100 ml of the carrier; 5.5 g and 10 g TiO<sub>2</sub> on pumice, 11.8 g, 5.0 g Al<sub>2</sub>O<sub>3</sub>, 0.8 g CoO<sub>2</sub> on pumice, 21 Ag<sub>2</sub>O<sub>2</sub> on pumice, 5.7 g, 1.9 MoO<sub>3</sub>, 1 g P<sub>2</sub>O<sub>5</sub>, 0.3 Fe<sub>2</sub>O<sub>3</sub> on pumice; 15.2 g, 3.6 MoO<sub>3</sub>, 1.6 H<sub>2</sub>O, 0.8 TiO<sub>2</sub> on Al (II) or pumice. The salts and the oxides were placed on the carriers from a thin suspension by a slow evapn. of the corresponding salt, oxide, and carrier mixt., with or without help of sacrificial organic binders. The catalysts were slowly dried at 100° in air stream, followed by a gradual increase to 300° within 12 hrs., and holding at 320° for addnl. 12 hrs. The final activation was achieved by heating for 40 hrs. at 370° in a rapid air stream. One-pass conversions of 75-80% were obtained with the best mixed oxide catalyst, with no decrease in activity for 600 hrs. The air-furfural molar ratios were 100:1 to 4000:1, and the contact times 0.75-2 sec. The best catalyst was II, and the optimal conditions: air-furfural molar ratio 1800:1 to 2400:1, temp. 270°, contact time 1.5 sec.; 97% of furfural was oxidized, yield 80% maleic acid. Andrew Dravnieks -

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CIA-RDP86-00513R001755020015-5  
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USSR / Soil Science. Organic Fertilizers.

J

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95773.

Author : Tarvidas, J.

Inst : Not given.

Title : Bacterial Fertilizers and Their Use.

Orig Pub: Valst. polit. ir moksl. lit. leidykla, 1957,  
87 psl., il., rb. 1,00.

Abstract: No abstract.

Card 1/1

3180 TARVIDAS, St.

Fiziko - Geograficheskiy Obzor Litovskoy SSR. Vil'Nos. Gospolitnauchizdat  
1954. 56 s. 22 sm. (o-vo po Raznostra Neniya Polit. I Nauch. Znaniy Litov.  
SSP). 6.000 EKZ. 60 K. - NA Litov. Yaz. - (54-57050) 551.4(47.45)

1. KALNINS, P.; HILLERS, S.; TARVILS, M.
2. USSR (600)
4. Furan
7. Oxidation of furan to maleic anhydride by air oxygen in vapor-gas phase over a vanadium oxide catalyst. Latv. PSR Zin. Akad. Vestis 3, 1951.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. TARVIDS, YM. HILLERS, S. KALNINS, P.
2. USSR (600)
4. Oxidation
7. Oxidation of furan to maleic anhydride by air oxygen in vapor-gas phase over a vanadium oxide catalyst. Latv. PSR Zin. Akad. Vestis no. 3, 1951
9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

LIVANOV, K.V.; TARVIS, T.V.

Sorghum in arid areas of the Southeast. Zemledelie 7 no.2:71-75  
F '59. (MIRA 12:3)

1. Krasnokutskaya gosudarstvennaya selektsionnaya stantsiya.  
(Sorghum)

TARVIS, T.V.

Microbiological changes caused by the deepening of the plow layer  
of Chestnut soils. Trudy Inst. mikrobiol. no.7:266-274 '60.  
(MIRA 14:4)

(SOIL MICRO-ORGANISMS)

(TILLAGE)

USSR/Zooparasitology - Ticks and Insects - Carriers of Disease G.  
Stimuli. Insects.

Abs Jour : Ref Zhur - Biol., No 11, 1958, 48231  
Author : Farvit-Gontar', I.A., Talalova, N.P.  
Inst : Kirghiz Scientific Research Institute of Epidemiology,  
Microbiology and Hygiene.  
Title : The Mosquitoes of Kirghizia and Their Comparative Epide-  
miological Significance.  
Orig Pub : Sb. Tr. Kirg. n.-i. in-ta epidemiol., mikrobiol. i gigeny,  
1956, vyp. 2, 90-96.  
Abstract : No abstract.

Card 1/1



TARVIT-GONTAR, I. A.

USSR/Zooparasitology - Acarina and Insect-Vectors of Disease  
Pathogens.

G-4

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10122

Author : Tarvit-Gontar, I.A.

Inst :

Title : Some Characteristics of the Biology of *Phlebotomus papatasi* in Kirgiz.

Orig Pub : Tr. In-ta zool. i parazitol. AN KirgSSR, 1956, No 5, 109-119

Abstract : In northern Kirgiz *Ph. papatasi* appears in small numbers and is rarely met with; in southern Kirgiz it predominates in some locations. There are 5 districts in Kirgiz where this species prevails, the characteristics of which are stated. Factors in the south delineating the zone of habitation of *Ph. papatasi* are increased humidity and height above sea-level; in the north-- the period of summer with an average temperature not lower than 18°.

Card 1/2

USSR/Zooparasitology - Acarina and Insect-Vectors of Disease  
Pathogens.

G-4

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10122

The first mosquitoes appears in southern Kirgiz at the end of April; mass flight begins at the beginning of June; mosquitoes disappear at the end of August. The prevalence of *Ph. papatasi* in Kirgiz is in accordance with the rule established by V.N. Beklemishev and A.V. Dolmatova in their analysis of the geographic prevalence of the species.

Card 2/2

FRUMZE-CAVALLI, I. A., FRUMZE, I. A., L. A., FRUMZE, I. A.,  
FRUMZE, I. A., FRUMZE, I. A.

"Epidemiological characteristics of the tick-borne encephalitis and  
the fight against its carrier in Kirgizia" p. 170.

O svestiya sovetskoye go parazitologicheskimi problemami i prikladnoy  
biologiyey. 22-29 Oktobra 1959 g. (Tenth Conference on Parasitological  
Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad,  
1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1. 250pp.

Kirgizian Inst. of Epidemiology and Microbiology/Frumze

G-4

USSR / Zooparasitology. Mites and Insects -  
Carriers of Disease Agents

Abs Jour: Ref Zhur-Biol., No 20, 1958, 91075

Author : Tarvit-Gontar, I. A.

Inst : The Kirghiz Scientific Research Institute for  
Epidemiology, Microbiology and Hygiene

Title : Biological and Ecological Characteristics of  
the Sandflies in Kirgizia: Phlebotomus Caucas-  
icus Marz. Report I.

Orig Pub: Sb. tr. Kirg. n.-1. in-ta epidemiol., mikro-  
biol. i gigiyeny, 1957, vyp. 3, 169-177

Abstract: Phlebotomus caucasicus is a dangerous sandfly  
in Southern Kirgizia as a potential cause of  
epidemic infection. The author arrived at this  
conclusion after a study of its biology, ecol-  
ogy and having ascertained its close contact

Card 1/2

USSR / Zooparasitology. Mites and Insects -  
Carriers of Disease Agents

G-4

Abs Jour: Ref Zhur-Biol., No 20, 1958, 91077

Author : ~~Tarvit-Gontar~~, I. A.  
Inst : Kirghiz Scientific Research Institute for Epi-  
demiology, Microbiology and Hygiene  
Title : Biological and Ecological Characteristics of  
Sandflies in Kirgizia: Phlebotomus alexandri  
Sint. Report III.

Orig Pub: Sb. tr. Kirg. n.-i. in-ta epidemiol., mikro-  
biol. i gigiyeny, 1957, vyp. 3, 183-190

Abstract: Phlebotomus alexandri is widespread in Southern  
Kirgizia and is absent in the North. Sandfly  
controls should be instituted not only in in-  
habited localities, but also in the adjacent  
natural zones. Rodent burrows should best

Card 1/2

TARVIT-GANTAR', I.A.

Comparative ecological, biological, and epidemiological  
characteristics of *Phlebotomus* in Kirghizia. Med. paras.  
1 paraz. bol. 29 no. 1, 49-53 Ja-V '60. (MIRA 13:10)  
(KIRGHIZISTAN—MOTH FLIES)

TARVIT-GONTAR', I.A.

Biological and ecological characteristics of different moth fly  
species in Kirghizia. Zool.Zhur. 39 no.3:399-406 '60.  
(MIRA 13:6)

1. Kirghiz Research Institute of Epidemiology, Microbiology and  
Hygiene, Frunze.  
(Kirghizistan--Moth flies)

TARVIT-GONTAR', I.A.; LOGACHEVA, L.S.; KICHATOV, E.A.; KIREYEVA, O.V.;  
ROSHKO, N.P.; GOLOBUTO, V.V.; RODIONOV, V.P.

Study of centers of tick-borne spirochetosis, and methods for the  
control of carriers. Sov. zdrav. Kir. no.1:44-46 Ja-F '62.  
(MIRA 15:4)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny  
(direktor - kand.med.nauk V.M.Perelygin), Respublikanskoy sanitarno-  
epidemiologicheskoy stantsii (glavnyy vrach - A.A.Mashkevich) i  
Sanitarno-epidemiologicheskogo otryada Leningradskogo rayona  
(glavnyy vrach - P.P.Yagudyayev).

(LENIN DISTRICT (OSH PROVINCE)—SPIROCHETOSIS)  
(TICKS AS CARRIERS OF DISEASE)

TARVIT-GONTAR', I.A.; BAYRIT, F.A.

Quick method for preparing gamasid mites for microscopic slides.  
Sov. zdrav. Kir. no.1:59 Ja-F '62. (MIRA 15:4)

1. Iz Kirgizakogo instituta epidemiologii, mikrobiologii i gigiyeny  
(direktor - kand.med.nauk V.M.Perelygin).  
(MITES) (MICROSCOPY, TECHNIQUE)



TARVIT-GONTAR', I.A.

Mosquitoes in natural landforms of Kirghizistan. Sbor.ent.rab.  
no.1:146-161 '62. (MIRA 16:2)  
(Kirghizistan--Mosquitoes)

TARVIT--GONTAR', I.A.; MAKSIMOVA, V.S.

Experience in the eradication of a focus of tick-borne spiro-  
chetosis. Med. paraz. i paraz. bol. 32 no.4:447-451 J1-Ag '63.  
(MIRA 17:8)

1. Iz Kirgizskogo nauchno-issledovatel'skogo instituta epidemio-  
logii, mikrobiologii i gigiyeny (dir. - kand. med. nauk V.M.  
Perelygin).

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PALIY, V.F., red.; TARVIT-CONTAR', I.A., red.; IBRAIMOVA, K., red.;  
MARKOV, F.I., red.; PEK, L.V., red.; TARBINSKIY, S.P., red.

[Collection of entomological papers] Sbornik entomologicheskikh rabot. Frunze, Izd-vo "Ilim," 1965. 137 p.  
(MIRA 18:6)

1. Vsesoyuznoye entomologicheskoye obshchestvo. Kirgizskoye otdeleniye.

PROTSENKO, A.I., otv. red.; PALIY, V.F., red.; TARVIT-GONTAR', I.A.,  
red.; IERAIMOVA, K., red.; TARBINSKIY, S.P., red.; PER,  
L.V., red.; MARKOV, F.I., red.

[Entomological studies in Kirghizia] Entomologicheskie is-  
sledovaniia v Kirgizii. Frunze, "Ilim", 1965. 120 p.  
(MIRA 18:12)

1. Akademiya nauk Kirgizskoy SSR, Frunze.